

REMARKS

Upon entry of the Amendment, claims 1-33 are pending in the application.

Claims 2, 3, 5, 7 and 9-12 have been amended to recite “said at least one compound consisting essentially of carbon, fluorine and silicon.” Support for this amendment can be found in original claim 1.

Claims 20-33 have been added. Support for the new claims can be found in the original claims 1-19 and page 4, lines 2-10, of Applicants’ specification.

Claims 1-19 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

With respect to claim 1, the Examiner states that it is unclear if at least one organic layer is a light emitting layer and other types of organic layers may be included or if all of the at least one organic layer(s) have to be a light emitting layer. The Examiner also states that such language makes it unclear if the layer containing at least one compound consisting essentially of carbon, fluorine and silicon is a light emitting layer.

Claim 1 recites a light emitting element which is defined by two recitations: (1) It comprises at least one organic layer which includes a light emitting layer; and (2) At least one layer of at least one organic layer(s) contains at least one compound consisting essentially of carbon, fluorine and silicon. Applicant submits that the recited elements (1) and (2) in claim 1 are not defined as being directly related. Thus, the “at least one compound” may be in any layer of the organic layer, including at the least one organic layer which includes the light emitting

layer including any other of the at least one organic layer(s). See, for example, Applicant's specification, page 19, lines 17-23. Claim 1 may be broad in that it includes multiple options, but the language is clear and definite.

With respect to claim 9, the Examiner states that it is unclear if "the compound" is the compound consisting essentially of carbon, fluorine and silicon or if "the compound" is a separate light emitting compound.

In the interest of clarification, Applicant has amended claims 2, 3, 5, 7 and 9-12 to recite "said at least one compound consisting essentially of carbon, fluorine and silicon."

Accordingly, Applicant submits that the claims are clear and definite and respectfully request that the Examiner reconsider and withdraw the § 112, second paragraph, rejection.

Claims 1, 2, 18 and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Aoki et al., U.S. Patent No. 6,573,650 ("Aoki").

The Examiner's position is that the device of Aoki includes a photocatalyst-containing layer which may comprise a binder according to the formula $YnSiX_{4-n}$, ($n=1$ to 3), wherein Y may be a fluoroalkyl group and X may be a halogen (see Aoki, column 8, lines 47-65). The Examiner considers the formula $YnSiX_{4-n}$ to read upon the requirement that a compound of one of the layers consist essentially of carbon, fluorine and silicon.

Applicants submit that there is an error in the disclosure of U.S. Patent No. 6,573,650, and that the language of U.S. Patent No. 6,573,650 is easily misinterpreted. Applicants have reviewed the Japanese application of U.S. Patent No. 6,573,650 and have found that the specification in U.S. Patent No. 6,573,650 has been mistranslated to English. Specifically, the

examples of the organopolysiloxanes at column 8, lines 66 to column 9, line 65 are not organopolysiloxanes but in actuality are precursors of organopolysiloxanes. Applicants submit that the examples listed at column 8, lines 66 to column 9, line 65 are actually examples of compounds of the formula Y_nSiX_{4-n} . The compounds of the cited formula Y_nSiX_{4-n} of Aoki are used to make the organopolysiloxanes, and the compounds of the cited formula are not used as the binders. See Aoki, column 8, lines 52-62 (emphasis added):

Examples of such binders include (1) organopolysiloxanes having high strength, obtained by hydrolyzing and polycondensing chlorosilane, alkoxysilanes, or the like through sol-gel reaction or the like; and (2) organopolysiloxanes excellent in water- and oil-repellency, obtained by crosslinking reactive silicones.

The organopolysiloxanes (1) may chiefly be hydrolyzed-condensed or co-hydrolyzed products of one of or two or more of silicon compounds represented by the general formula Y_nSiX_{4-n} ($n=1$ to 3).

Column 8, line 66, of Aoki should properly read “specific examples of the silicon compounds condensed or co-hydrolyzed to make the organopolysiloxanes (1) include ...”.

See also column 9, lines 66-column 10, line 3 of Aoki (emphasis added):

It is particularly preferable to use, as the binders, polysiloxanes containing fluoroalkyl groups. Specific examples of such polysiloxanes include hydrolyzed-condensed or co-hydrolyzed products of one of or two or more of the following fluoroalkylsilanes,

Further, Applicants submit that each of the binders disclosed in Aoki is organopolysiloxane, which is a chemical compound that always has an SiO₂ bond within the binder molecule. As such, an oxygen atom is always included in the organopolysiloxane (1) (col. 8, line 59). Accordingly, Applicants submit that the claimed compound consisting essentially of carbon, fluorine and silicon, as claimed in claim 1, is not within the scope of the binders taught in Aoki.

Additionally, Applicants submit that organopolysiloxanes are not within the scope of Applicants' general formula (I), as claimed in claim 3. Further, in an embodiment of Applicants' claimed invention, Ar¹ to Ar⁴ in general formula (I) are aryl groups substituted by fluorine. On the contrary, Aoki does not disclose an embodiment of Y_nSiX_{4-n} which has an aryl group as a substituent. In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Appln. No.: 10/644,872
Amendment under 37 C.F.R. § 1.111

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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